

## Complete Summary

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### TITLE

End stage renal disease (ESRD): percentage of prevalent adult hemodialysis (HD) patients who were dialyzed using an arterial venous fistula (AVF) during their last HD treatment during the study period.

### SOURCE(S)

Centers for Medicare & Medicaid Services. 2004 Annual Report, End Stage Renal Disease Clinical Performance Measures project. Baltimore (MD): Centers for Medicare & Medicaid Services, Center for Beneficiary Choices; 2004 Dec. 100 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

#### Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percentage of prevalent adult hemodialysis (HD) patients who were dialyzed using an arterial venous fistula (AVF) during their last HD treatment during the study period.

### RATIONALE

The ESRD Clinical Performance Measures (CPM) Project is a national effort led by the Centers for Medicare & Medicaid Services (CMS), formerly the Health Care Financing Administration (HCFA), and its eighteen ESRD Networks to assist dialysis providers to improve patient care and outcomes.

The purpose of the ESRD CPM Project is to provide comparative data to ESRD caregivers to assist them in assessing and improving the care provided to dialysis patients.

While significant improvements in care have occurred, the opportunities to improve care for dialysis patients in the U.S. in the areas of adequacy of dialysis, vascular access, and anemia management continue.

#### PRIMARY CLINICAL COMPONENT

End stage renal disease (ESRD); hemodialysis (HD); vascular access; arterial venous fistula (AVF)

#### DENOMINATOR DESCRIPTION

Prevalent adult (greater than or equal to 18 years old) hemodialysis (HD) patients in the sample for analysis

#### NUMERATOR DESCRIPTION

Number of prevalent patients in the denominator who were dialyzed using an arterial venous fistula (AVF) during their last hemodialysis (HD) treatment during the study period\*

\*The most recent data collected for the End Stage Renal Disease (ESRD) Clinical Performance Measures (CPM) Project were for the 3 month time period (October - December 2003) for the in-center HD patients. However, facilities implementing this measure may choose any time period.

### Evidence Supporting the Measure

#### EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

### Evidence Supporting Need for the Measure

#### NEED FOR THE MEASURE

Use of this measure to improve performance

#### EVIDENCE SUPPORTING NEED FOR THE MEASURE

Centers for Medicare & Medicaid Services. 2004 Annual Report, End Stage Renal Disease Clinical Performance Measures project. Baltimore (MD): Centers for Medicare & Medicaid Services, Center for Beneficiary Choices; 2004 Dec. 100 p.

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

External oversight/Medicare  
Internal quality improvement  
National reporting

## Application of Measure in its Current Use

### CARE SETTING

Ambulatory Care

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

### TARGET POPULATION AGE

Age greater than or equal to 18 years

### TARGET POPULATION GENDER

Either male or female

### STRATIFICATION BY VULNERABLE POPULATIONS

Measure results were stratified by age, gender, race, and ethnicity.

## Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

The incidence of treated end stage renal disease (ESRD) in the United States is 333 per million population. As of December 31, 2003, there were 310,095 patients receiving dialysis therapy in the United States.

### EVIDENCE FOR INCIDENCE/PREVALENCE

Centers for Medicare & Medicaid Services. 2004 Annual Report, End Stage Renal Disease Clinical Performance Measures project. Baltimore (MD): Centers for Medicare & Medicaid Services, Center for Beneficiary Choices; 2004 Dec. 100 p.

## ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

## BURDEN OF ILLNESS

Unspecified

## UTILIZATION

Unspecified

## COSTS

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

### IOM CARE NEED

Living with Illness

### IOM DOMAIN

Effectiveness

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

Prevalent adult (greater than or equal to 18 years old) hemodialysis (HD) patients in the sample for analysis

### DENOMINATOR SAMPLING FRAME

Patients associated with provider

### DENOMINATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

Prevalent adult (greater than or equal to 18 years old) hemodialysis (HD) patients in the sample for analysis

#### Exclusions

Unspecified

### RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

### DENOMINATOR (INDEX) EVENT

Clinical Condition

Therapeutic Intervention

### DENOMINATOR TIME WINDOW

Time window precedes index event

### NUMERATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

Number of prevalent patients in the denominator who were dialyzed using an arterial venous fistula (AVF) during their last hemodialysis (HD) treatment during the study period\*

\*The most recent data collected for the End Stage Renal Disease (ESRD) Clinical Performance Measures (CPM) Project were for the 3 month time period (October - December 2003) for the in-center HD patients. However, facilities implementing this measure may choose any time period.

#### Exclusions

Unspecified

### MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

### NUMERATOR TIME WINDOW

Fixed time period

### DATA SOURCE

Medical record

### LEVEL OF DETERMINATION OF QUALITY

Individual Case

#### PRE-EXISTING INSTRUMENT USED

Unspecified

#### Computation of the Measure

#### SCORING

Rate

#### INTERPRETATION OF SCORE

Better quality is associated with a higher score

#### ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

#### DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

Measure results were stratified by patient characteristics and across each of the 18 ESRD Networks. Because data were obtained from a stratified random sample of patients (i.e., a separate random sample from each of the 18 Networks) it was necessary to weight the collected data in order to obtain unbiased estimates of mean clinical values for the total population. This weighting was done according to the proportion of each Network's total population sampled.

#### STANDARD OF COMPARISON

External comparison at a point in time  
External comparison of time trends  
Internal time comparison

#### Evaluation of Measure Properties

#### EXTENT OF MEASURE TESTING

Unspecified

#### Identifying Information

#### ORIGINAL TITLE

Vascular access CPM I: maximizing placement of arterial venous fistulae (AVF).

#### MEASURE COLLECTION

[ESRD Clinical Performance Measures](#)

MEASURE SET NAME

[Vascular Access](#)

DEVELOPER

Centers for Medicare & Medicaid Services

INCLUDED IN

National Healthcare Disparities Report (NHDR)  
National Healthcare Quality Report (NHQR)

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

1999 Dec

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

Centers for Medicare & Medicaid Services. 2004 Annual Report, End Stage Renal Disease Clinical Performance Measures project. Baltimore (MD): Centers for Medicare & Medicaid Services, Center for Beneficiary Choices; 2004 Dec. 100 p.

MEASURE AVAILABILITY

The individual measure, "Vascular Access CPM I: Maximizing Placement of Arterial Venous Fistulae (AVF)," is published in "2004 Annual Report, End Stage Renal Disease Clinical Performance Measures Project." This document is available in Portable Document Format (PDF) from the [Centers for Medicare and Medicaid Services \(CMS\) Web site](#).

For more information, refer to the CMS Web site at, [www.cms.hhs.gov](http://www.cms.hhs.gov).

NQMC STATUS

This NQMC summary was completed by ECRI on July 15, 2005. The information was verified by the measure developer on August 9, 2005.

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The logo for FIRSTGOV, with "FIRST" in blue and "GOV" in red, and a small red star above the "I".

